# Sukow, Jennifer

From: Sukow, Jennifer

Sent: Wednesday, October 12, 2011 12:07 PM
To: 'Koreny, John S.'; Raymondi, Rick; Wylie, Allan
Cc: Luke, Tim; Vincent, Sean; Yenter, Cindy

Subject: RE: Jones and Magic Springs

John,

Thank you for the data. After comparing the data you compiled with the data in IDWR's database, I have found that there are several points we need to clear up before we can finalize the calibration target. The sample data sheets you provided show that Jones was inconsistent in which measurement he reported in his annual submittals to IDWR. Some of the values reported were the 'total' value, others were the 'to Creek' value. Note that after Jones switched to measuring at the Creek and Bar S, the 'total' calculated doesn't include the irrigation pumps, so we will need to know when that switch was made. We'll also need the difference measured at the 'WHR Spill' for our calculation of total spring flow. I expect that clearing up these inconsistencies in the data Jones submitted will significantly improve the calibration target.

Tim Luke would also like to correct the weekly data entered in IDWR's database, so that it reflects a consistent measurement point. We are requesting that you provide us with a copy of the complete set of measurement notebooks, so that we can check and correct the data previously submitted by Jones, as well as extract the rest of the data needed to complete the ESPAM calibration target. It would also be helpful if you could provide a map or site diagram showing the location of the eight measurement points recorded by Jones.

Thanks, Jennifer

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**From:** Koreny, John S. [mailto:John.Koreny@hdrinc.com]

**Sent:** Friday, October 07, 2011 8:04 PM

To: Raymondi, Rick; Sukow, Jennifer; Wylie, Allan

**Subject:** RE: Jones and Magic Springs

Rick, Jennifer and Allan-

I have finished looking at Jennifer's 9/19/11 memo on the Three Springs/Weatherby/Hoagland flow data. Here are my comments:

The Jones hatchery flow data goes back to 1975. I have attached the data and a scan of the data books (one page per year) so you can see the quality of the data records. I called Frank Erwin, WD 36A watermaster, to ask about the other irrigation diversions. He indicates that the flow data for the other irrigators is on the water accounting web page. He doesn't have any other data. So even though we have the hatchery flow data back to 1975- we don't have the other irrigation data. So I think it is appropriate to limit the total flow data to post-1995.

My only other comment is that I think we should consider adding 3.5 cfs to the Jones hatchery flow from September to June to account for un-diverted flow at the lower hatchery. Page 2, para. 3 of your memo (and Footnote 1, page 2) indicates that there is undiverted flow in the lower spring. The footnote indicates that IDWR measured this at 3.5 cfs. I confirmed this during my site visit. The hatchery manager explained that it comes in low in the system and they have to pump it up. They only use it during the summer to augment critical low-flow. From September to June it isn't used. So during this period I would suggest adding it in.

Thanks!

John

## John Koreny

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**From:** Koreny, John S.

**Sent:** Monday, October 03, 2011 11:22 AM **To:** 'Raymondi, Rick'; Sukow, Jennifer

Cc: 'Wylie, Allan'

**Subject:** Jones and Magic Springs

Rick and Jennifer-

I spent Wed to Friday last week visiting the springs in the Hagerman reach. I spent a day with the Jones springs hatchery manager and a day with the Magic springs folks.

### **Jones**

The Jones spring flow data goes back to 1978. All of the spring flow diversions are recorded except for some undiverted flow during the non-irrigation season. I would anticipate that being up to about 5 to 10 percent of the total (around 5 cfs) based on what they reported and the way the diversion equipment is set up.

There are some senior irrigators that also divert from the spring. There diversions are also measured- but I don't know how far they go back. I am now checking into that. I am preparing a memo with the findings, a map showing the details and some sumamry tables. I will also prepare comments to the memo Jennifer sent out. My opinion is that we should use Jones spring as a Class A calibration target just like the other springs (Blue Lakes, etc.).

### Magic

All of the diversions on Magic Springs are very carefully measured and reported. The data goes back until the mid 1990s. There is no undiverted flow. This is a very well managed and large hatchery and they take measuring spring flow data very seriously. My opinion is that we should use Magic Springs as a Class A calibration target.

More to come.

John

P.S. Could you please return an email so I know this hit your radar.

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